

## ABSTRACT

Compositions and methods for attracting, capturing and killing populations of cotton boll weevils (*Anthonomus grandis* Boh.) in boll weevil traps are disclosed. With respect to the attraction and capture of boll weevils with Grandlure, the synthetic pheromone of the cotton boll weevil, there is generally an increased number of boll weevils captured in the trap cylinder when an insecticide dispenser is included in the trap cylinder to kill the weevils and thus prevent their escape. Additionally, dead boll weevils are more accurately counted than live boll weevils. The compound dichlorvos (2,2-dichlorovinyl dimethyl phosphate or DDVP) is the most preferred among those few insecticides that can be used in traps for killing and preventing weevil escapes. This is also the preferred insecticide when combined with Grandlure in a single dispenser to kill boll weevils or inhibit their ability to develop normally and reproduce. The single Grandlure dichlorvos dispenser provides for significant savings in labor expenses in large area trapping and eradication programs and significantly reduces the disposal of waste materials from spent dispensers.